

WHAT IS CLAIMED IS:

- 1        1. A method for obtaining software performance data, said method comprising:  
2              entering a software application;  
3              setting a trace data flag to off;  
4              while said software application has not exited, iteratively performing the following  
5              steps for each module initiated by said software application:  
6                  setting said trace data flag to on if said module is registered with a performance  
7                  analyzer tool;  
8                  determining if said module includes trace data hooks;  
9                  if said module includes said trace data hooks and said trace data flag is on:  
10                   transmitting a request to said performance analyzer tool to record trace data in  
11                   response to encountering an embedded trace data hook in said module; and  
12                   if said module does not include said trace data hooks and said trace data flag is on:  
13                   transmitting a request to said performance analyzer tool to record trace data in  
14                   response to entry and exit of said module; and  
15                   receiving from said performance analyzer tool a report based on said trace data.
  
- 1        2. The method of claim 1 wherein said software application is written in the C  
2              programming language.
  
- 1        3. The method of claim 1 wherein said software application is written in the C++  
2              programming language.
  
- 1        4. The method of claim 1 wherein said software application is written in the  
2              assembler programming language.

1           5. The method of claim 1 wherein said trace data in response to entry of said  
2 module includes module name and time of module entry.

1           6. The method of claim 1 wherein said trace data in response to exit of said  
2 module includes module name and time of module exit.

1           7. The method of claim 1 wherein said trace data hooks include:  
2           program entry; and  
3           program exit.

1           8. The method of claim 1 wherein said trace data hooks include:  
2           function entry; and  
3           function exit.

1           9. The method of claim 1 wherein said method for obtaining software performance  
2 data further comprises:  
3           transmitting a request to said performance analyzer tool for said report based on  
4 said trace data.

1           10. The method of claim 1 wherein said report based on said trace data is in  
2 graphical format.

1           11. The method of claim 1 wherein determining if said module includes trace data  
2 hooks is performed by an operating system service.

1           12. The method of claim 1 wherein an operating system service determines if said  
2 module is registered with said performance analyzer tool.

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1           13. The method of claim 1 wherein said transmitting a request to said performance  
2        analyzer tool to record trace data in response to entry and exit of said module is initiated  
3        by an operating system service.

1           14. A system for obtaining software performance data, said system comprising a  
2        computer processor, said computer processor implementing a method comprising:  
3                 entering a software application;  
4                 setting a trace data flag to off;  
5                 while said software application has not exited, iteratively performing the following  
6        steps for each module initiated by said software application:  
7                     setting said trace data flag to on if said module is registered with a performance  
8        analyzer tool;  
9                     determining if said module includes trace data hooks;  
10                if said module includes said trace data hooks and said trace data flag is on:  
11                     transmitting a request to said performance analyzer tool to record trace data in  
12        response to encountering an embedded trace data hook in said module; and  
13                if said module does not include said trace data hooks and said trace data flag is on:  
14                     transmitting a request to said performance analyzer tool to record trace data in  
15        response to entry and exit of said module; and  
16                 receiving from said performance analyzer tool a report based on said trace data.

1           15. The system of claim 14 wherein said software application is written in the C  
2        programming language.

1           16. The system of claim 14 wherein said software application is written in the C++  
2        programming language.

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1           17. The system of claim 14 wherein said software application is written in the  
2 assembler programming language.

1           18. The system of claim 14 wherein said trace data in response to entry of said  
2 module includes module name and time of module entry.

1           19. The system of claim 14 wherein said trace data in response to exit of said  
2 module includes module name and time of module exit.

1           20. The system of claim 14 wherein said embedded trace data hooks include:  
2           program entry; and  
3           program exit.

1           21. The system of claim 14 wherein said embedded trace data hooks include:  
2           function entry; and  
3           function exit.

1           22. The system of claim 14 wherein said method for obtaining software  
2 performance data further comprises:  
3           transmitting a request to said performance analyzer tool for said report based on  
4           said trace data.

1           23. The system of claim 14 wherein said report based on said trace data is in  
2 graphical format.

1           24. The system of claim 14 wherein determining if said module includes trace data  
2 hooks is performed by an operating system service.

1           25. The system of claim 14 wherein an operating system service determines if said  
2 module is registered with said performance analyzer tool.

1           26. The system of claim 14 wherein said transmitting a request to said  
2 performance analyzer tool to record trace data in response to entry and exit of said module  
3 is initiated by an operating system service.

1           27. A storage medium encoded with machine-readable computer program code for  
2 obtaining software performance data, the storage medium storing instructions for causing a  
3 software performance data system to implement a method comprising:

4                 entering a software application;  
5                 setting a trace data flag to off;  
6                 while said software application has not exited, iteratively performing the following  
7 steps for each module initiated by said software application:  
8                 setting said trace data flag to on if said module is registered with a performance  
9 analyzer tool;  
10                determining if said module includes trace data hooks;  
11                if said module includes said trace data hooks and said trace data flag is on:  
12                transmitting a request to said performance analyzer tool to record trace data in  
13 response to encountering an embedded trace data hook in said module; and  
14                if said module does not include said trace data hooks and said trace data flag is on:  
15                transmitting a request to said performance analyzer tool to record trace data in  
16 response to entry and exit of said module; and  
17                receiving from said performance analyzer tool a report based on said trace data.

1           28. The storage medium of claim 27 wherein said software application is written  
2 in the C programming language.

1           29. The storage medium of claim 27 wherein said software application is written  
2       in the C++ programming language.

1           30. The storage medium of claim 27 wherein said software application is written  
2       in the assembler programming language.

1           31. The storage medium of claim 27 wherein said trace data in response to entry of  
2       said module includes module name and time of module entry.

1           32. The storage medium of claim 27 wherein said trace data in response to exit of  
2       said module includes module name and time of module exit.

1           33. The storage medium of claim 27 wherein said trace data hooks include:  
2       program entry; and  
3       program exit.

1           34. The storage medium of claim 27 wherein said trace data hooks include:  
2       function entry; and  
3       function exit.

1           35. The storage medium of claim 27 further comprising instructions for causing  
2       the software performance data system to implement:  
3              transmitting a request to said performance analyzer tool for said report based on  
4       said trace data.

1           36. The storage medium of claim 27 wherein said report based on said trace data is  
2       in graphical format.

1           37. The storage medium of claim 27 wherein determining if said module includes  
2 trace data hooks is performed by an operating system service.

1           38. The storage medium of claim 27 wherein an operating system service  
2 determines if said module is registered with said performance analyzer tool.

1           39. The storage medium of claim 27 wherein said transmitting a request to said  
2 performance analyzer tool to record trace data in response to entry and exit of said module  
3 is initiated by an operating system service.